

**SUMMARY AND MINUTES FROM
PUBLIC INPUT SESSION CONCERNING
PROSPECTIVE EPA SCIENCE ADVISORY BOARD
REORGANIZATION AND STRUCTURAL CHANGES**

WEDNESDAY, DECEMBER 4, 2002 ❖ 9:30 AM TO 12:00 PM

SHERATON CRYSTAL CITY HOTEL, ARLINGTON, VA

I. Executive Summary

On December 4, 2002, from 9:30 a.m. to 12:00 p.m. at the Sheraton Crystal City Hotel in Arlington, Virginia, the Staff Office of EPA's Science Advisory Board (SAB or Board) held a meeting to solicit public input concerning the potential reorganization of and structural changes to the Board. In all, thirteen members of the public participated in the proceedings, and two written statements were submitted to the SAB Staff Office for consideration.

A number of recommendations and suggestions were put forward by the participants. Early on, the discussion revolved around adding additional standing committees to the existing SAB structure. Specifically, there were several suggestions for establishing standing committees on:

- data-quality issues that would encompass the Data Quality Act and its guidelines
- environmental information
- statistical quality
- social and behavioral science

More broadly, there were suggestions by some participants for the greater inclusion of statisticians, and social and behavioral scientists on the various committees of the Board.

As the discussion progressed, the focus of the meeting switched to the matter of SAB standing committees versus *ad hoc* committees. There were many suggestions that essentially called for the elimination of the standing committee structure and replacing it with a pool of experts on all the relevant issues to be used as a resource when forming ad hoc committees or working groups. The proposals regarding the Executive Committee were across the spectrum, ranging from its abolition to its continued involvement with the SAB.

There was also a discussion on the concept of the SAB "farming out" some of its work. Under these proposals, the Board would task-out work to appropriate professional organizations for them to either only do the preparatory work or actually conduct the peer review. In a similar vein, there was also discussion of the SAB tasking more work out to the NAS or the NRC. [It should be noted that, as a FACA committee, it would not be permissible for the Board to simply delegate any of its activities to an outside entity.]

It was also noted that the Board was still producing high quality products, and that the panel selection process seemed to have improved over the past six months.

II. Introduction: Background and Overview

The Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office held a public session on structural reorganization of the SAB in Arlington, Virginia on December 4, 2002. An invitation to attend the session was published in the *Federal Register* on November 26, 2002 (67 FR 70729-70730), which also invited members of the public who could not attend to contribute information by email for consideration by the SAB Staff Office.

The purpose of the public session was to solicit public input concerning the possible reorganization of the Science Advisory Board to increase its effectiveness while maintaining its current high standards of transparency. The SAB Staff Office plans to consider the inputs suggested as it works to develop new ideas and approaches to restructure the Board.

Congress established the SAB in 1978 with the Environmental Research, Development and Demonstration Authorization Act (ERDDAA) (42 U.S.C. 4365). Since that time, the EPA SAB Staff Office has reported directly to the Administrator and has supported the work of the SAB. Composed of non-Federal government experts, the SAB provides the Administrator with outside, independent advice on scientific, engineering, economics, and social sciences issues that impact the technical basis for EPA positions, including regulations, guidance, and research plans. Generally, the SAB does not address policy aspects of issues confronting the EPA, since such matters are the jurisdiction and responsibility of the EPA Administrator.

The SAB conducts its business in public view and benefits from public input during its deliberations. Through these public proceedings, EPA positions are subjected to critical examination by leading experts in various fields who serve on SAB Committees and Panels. By statute, the Board is subject to the provisions of the Federal Advisory Committee Act (FACA) [5 U.S.C. App.] that require public access and public input into the advisory process.

Thirteen members of the public attended the meeting and two sets of written comments were received related to the session.

The meeting focused on two questions for discussion: (1) Overall, how well has the EPA's Science Advisory Board fulfilled its mission—and what are some ways in which it could improve? and (2) What type of SAB structure and substructures are needed to fulfill the SAB roles and be flexible enough to meet future needs of EPA?

Included in this report are the minutes of the public input session held on December 4, 2002 at the Sheraton Crystal City Hotel in Arlington, Virginia. While not an actual transcript, these minutes attempt to provide an accurate portrayal of the comments, suggestions, and ideas offered by those present. Also included as appendixes are the meeting's agenda, the list of attendees, and an editorial written by the Chair of the Board, Dr. William Glaze.

III. Minutes of the Meeting

Mr. Fred Butterfield began the morning's proceedings by welcoming everyone to the meeting. He stated that he was the Designated Federal Officer for the Science Advisory Board, and that

while the SAB is a Federal advisory committee chartered under FACA, this would not be a FACA meeting since the Reorganization Sub-Committee would be reporting to the full Executive Committee of the SAB. He then introduced Dr. Vanessa Vu, the Staff Office Director, and Mr. Robert Flaak, the Deputy Director. He also informed everyone that Dr. William Glaze, the Chair of the Board, would not be coming due to the inclement weather.

He then briefly touched on some logistical issues, first asking people to sign in if they had not yet done so. He also stated that while there would be a break halfway through, everyone should feel free to get up anytime if need be.

He closed his remarks by stating that, given the number of attendees, the meeting would more resemble an on-going dialogue than a lecture. He then asked all the participants around the table to introduce themselves and state what their particular interest was with the SAB.

After all the attendees introduced themselves, Dr. Vu made a few introductory remarks. She highlighted that the Staff Office was holding this meeting in an effort to solicit input from the public. She then passed on Dr. Glaze's regrets for not being able to attend, and that he would therefore rely on the minutes of the meeting and on colleagues in attendance. She said that she would highly value any thoughts presented on the structure or composition of the Board to increase its effectiveness in supporting the Agency's mission, and also serving both the public and Congress.

She continued by stating that in October, the Executive Committee felt that there was a need to review the current structure of the SAB. Over the last 24 years, it has grown considerably, and some changes may need to accompany this growth. She also commented that the Reorganization Sub-Committee under the leadership of Dr. Glaze is looking at Fiscal Year 2003 as a target date for developing a reorganization plan, with implementation of that plan hopefully occurring in Fiscal Year 2004. This is a reasonable goal, Dr. Vu said, but the key aspect of it is receiving input from everyone, especially the public. She stated that receiving public input was the main reason for this meeting. There will also be a spring session, providing an opportunity for more dialogue and the discussion of additional options and proposals. She also expressed hope that the public would continue to provide valuable input into the restructuring process of the Board.

Recently, the Board has put emphasis on having more frequent public meetings, something that Dr. Vu said she has made a priority since taking over the position of Director of the Staff Office. Dr. Vu continued, stating that the first public session in September of 2002 focused mostly on policy procedures, communication (i.e., websites), and other public outreach efforts. This meeting of the Reorganization Sub-Committee, however, would focus on the substructure of the Board. Dr. Vu closed her introductory remarks by stating that the next meeting will be held in April 2003, at which point the Staff Office will provide an update as to where they are in the process. She then asked if there were any questions before the actual discussion began.

A participant asked if someone in the Staff Office could describe any thoughts by other members or Dr. Glaze regarding possible changes to the Board. He pointed out that the only thing that he had seen was an editorial written by Dr. Glaze (Appendix C) that was included among the documents handed out at the beginning of the meeting. In that document, the discussant said that

Dr. Glaze calls for a greater social science role on the Board, and that the Board needs to develop some type of future outlook.

Dr. Vu responded by saying that the editorial really stated both Dr. Glaze and the Executive Committee's view regarding the current situation of the Board. She stated that the editorial explains that the Board's mission has really expanded its scope over the years, by, for example, adding more economics and social sciences. But there is also a need for better integration among the different disciplines with which the Board deals. His editorial reflects the direction of the Board, which is echoed by the Administrators as well as the Agency.

The thirteenth and final participant arrived, and apologized for being late.

Mr. Bob Pruszkowski, the meeting's facilitator, began the working session by describing the ground rules. Participants wishing to comment were to raise their placard, and they would be called on to speak in the order they were seen by Mr. Pruszkowski. The same policy would apply to rebuttals. He stated that the focus of the meeting was to solicit input regarding potential structural changes to the SAB. He pointed out that this did not include discussion on procedural issues or internal dynamics. The goal of meeting was to obtain public insight on ways to make the SAB more inclusive and functional.

Mr. Pruszkowski then gave a brief background of the SAB. When it was established in 1978, there were only 15 members and 5 Standing Committees. It has now expanded to a membership of 120 with 10 Standing Committees. Though the Board has grown considerably, its structure has remained the same, and that is why the Staff Office is looking for public input. The questions that the participants should be asking themselves are 'what changes need to be made,' and 'what aspects of the Board should not be changed.'

He then informed the participants that there are two key questions that would be the focal point of the day's discussion. Question 1: How well has the SAB done its job?

- Has it met the requirements placed on it?
- What are its strengths? Weaknesses?

Mr. Pruszkowski then posed the related questions of 'how do you measure success?' and 'has the Board met that definition?' Also, he stated that he believed the most important question to be: 'Is the Board credible?'

Question 2: What substructure could be added or changed to better meet the mission of the Board, from a structural perspective?

- Are the Standing Committees meeting their goals?
- Are the additions of *ad hoc* committees or other adjunct committees viable? Why or why not?
- And, what is the rationale for having *ad hoc* committees?

Mr. Pruszkowski then mentioned that there are other models that the SAB can employ. He requested that the participants try as best as possible to keep the two questions separate. 'That is your charge,' he said. At this point, the meeting opened for discussion.

The round-robin discussion began with a proposal for the SAB to strongly consider establishing a Standing Committee on implementation of the Data Quality Act. The Act imposed new quality standards on information disseminated to the public by the EPA and most other federal agencies, a participant noted. The EPA promulgated new data quality guidelines in response to the Act's mandate. He said that there will be a number of data quality issues in various scientific areas where SAB expertise is needed, and would prove vital to the EPA. The EPA has already consulted the SAB Executive Committee on two generic Data Quality Act-related issues: reproducibility and robustness checks for proprietary models and data. The participant predicted that there would soon be many more issues related to this discipline.

He continued, saying that because *ad hoc* committees by their very nature can be called and then dismissed, a standing committee is needed for this area. He assured the attendees that it would be a very busy committee with a number of queries, and that the SAP would receive Data Quality Act issues very soon. He also proposed that if such a standing committee were to be formed, an interagency subcommittee be created as well. While that subcommittee could be an *ad hoc* committee, the participant urged that it in fact be an interagency committee because the Data Quality Act raises many interagency issues, such as robust requirements for proprietary models, test validation, and standards for reproducibility of data. He closed his remarks by again asking that the SAB consider forming a standing committee to deal with the Data Quality Act.

Mr. Pruszkowski then asked for comments or questions regarding these proposals.

Another participant stated that he has a natural resistance to the idea of a committee based on the Act itself. He said that he could accept a committee to handle that issue in general, but that it should not be tied to the Act. He offered that a standing committee on data quality issues across the board, but not necessarily linked to the Act, might be valuable.

The original discussant responded, stating that he felt that those were good arguments and that he would certainly consider them. He suggested that a generic standing committee on data quality issues, one that would certainly deal with the Data Quality Act and its related guidelines, might be more appropriate.

Another participant said that he agreed that there should be a committee dealing with data quality in general. Data quality, he pointed out, is part of the larger issue of statistics. As a parallel, he cited the NESEP standing committee, on which he once served that died a slow and horrible death. That committee was the advisory committee on policy and technology. He said that he would call a data quality committee a 'statistical quality committee' to assure the quality of the data used by the EPA. But, he then noted, 'quality is a tricky word, one that can be defined in many ways. Does it mean accurate data? Because statistical dissemination of information goes beyond data quality, it raises the question: how does the Agency respond to various complaints, or better yet, how does it meet the needs of the data-user committee?' He ended his remarks by suggesting that a strong statistical committee of some sort is needed on the SAB.

Dr. Vu then mentioned that the purpose of the meeting was to collect all the thoughts from the participants, and that they are not looking to reach a consensus. She suggested that clarification

of content was important. Also, she said that she wanted all those present to have the opportunity to weigh in with any views or suggestions that they might have regarding the Reorganization Sub-Committee's work.

Mr. Butterfield followed up Dr. Vu's comments by pointing out two key documents distributed at the beginning of the meeting. The first document was an excerpt from the 2001 Annual Report for the Science Advisory Board, described as a good primer on the Board's structure, which lists all the current committees. The second document was a membership summary table that listed the 10 standing committees, including the two statutory committees which are separately chartered but administratively housed, and the members for each of those committees.

A participant then inquired as to whether there are statisticians on any of the committees. Another responded affirmatively that there are statisticians on some of the committees.

The inquiring participant then asked for an explanation of their roles. He inquired: 'How many statisticians are there? Where are they located (committees)?' He said that he assumed that they would be on the Research Strategies Advisory Committee, but that he was not sure. His final question was 'what role does statistics play on the Board?'

The other participant again responded that he was aware of a number of statisticians on various committees.

Mr. Pruszkowski then indicated that those were very good questions, ones that get to the issue of roles and responsibilities and organizational dynamics. Then he summarized the ideas that had been put forth so far: a standing committee on data quality, an environmental committee on statistics, and a subcommittee on statistical quality. 'But with these proposals, new questions arise,' he said. Questions like, 'Who are the members? What is the committee structure? What would form a suggested committee? What would be the size of the committee? And what are the quality skills that go along with that committee?'

Another participant then offered his thoughts, stating that on the issue of data quality, he sees a need for a bigger environmental information committee. That committee could deal with such issues as the environmental indicators initiative, which is a big issue for the EPA, and the Governmental Performance and Results Act, which details how to produce outcomes. He then indicated that there are a lot of broad environmental information issues emerging and that they are broad enough to include data quality, statistics and modeling. He concluded by suggesting that if such a committee were to be formed, it should include experts in indicators and using information.

A participant then asked if the Staff Office normally employs a 'cascading review' and whether the data quality committee was a resource for the other committees to call upon. He explained that 'cascading' has certain values but would tend to be unwieldy. As a matter of explanation, the participant used the example of an ecological committee reviewing ecological information. In that situation, there are data quality issues that are crucial in that realm, like 'how is the toxicity measured?' This is not a statistical consideration, but rather more often deals with mechanical issues. He believes the key question is whether the data put into the statistical models is valid.

Once the data is deemed to be valid, there are advantages in ‘cascading’ the report into statistical groups, because statistical evaluation is more precise than data quality analysis.

Mr. Pruszkowski followed up, saying that those issues get into the areas of data exchange, data input, and data use, and the exchange of information between the committees established by the SAB and new committees as defined by the restructuring organization. It also gets into the roles and responsibilities of the restructuring process.

The participant pointed out that he was viewing the process from a more structural aspect. To him, the decision on how things are utilized is more of a procedural operation. But from a structural standpoint, once a product starts to be reviewed, he wondered how it flows into the system. He wondered if it first went, for example, to a human health group and then to statistical review, or whether the human health groups call on the statistical committee to add members to work within their pre-existing meeting structure.

Dr. Vu interjected that perhaps some background on the standing committee structure would be helpful, and asked Mr. Flaak to provide some relevant supplemental information.

Mr. Flaak provided a perspective to everyone on how the Staff Office conducts its business. He first said that he considered many of the ideas and suggestions that had been offered very valid and potentially useful, and that the Staff Office would be open to all these and any more that would come up later in the discussion.

He said that he has been on the Board since 1984, so he had seen a lot, but through all this, there have not been a lot of structural changes made to the Board. Most of the changes have been ‘post-it’ changes — adding a committee here, dissolving an *ad hoc* committee there. So the Staff Office was now looking much more broadly at the whole situation than had been done in that past. Mr. Flaak raised a related question: ‘Do the standing committees need to be eliminated, or should a few new committees be added?’ In the framework that the SAB does business, the SAB is an independently-chartered advisory committee that “administratively houses” two other independently-chartered FACA committees: the Clean Air Science Advisory Committee and the Advisory Council on Clean Air Compliance Analysis. All the other committees are subcommittees of the Science Advisory Board. Many were created 20 years ago and continue to exist because there is a defined need for them.

He explained that the standing committees support a number of areas of the EPA. The structure is set up this way: the committees report to the Executive Committee, which meets quarterly. He suggested that the idea of an environmental information committee or a data quality committee might be useful. In the past, advisory panels were established specifically for one purpose, for example, the Metals Assessment Panel. When the review is done and the report is submitted, the panel is disbanded- it no longer exists. When these panels are established, a determination is made as to whether a statistician or someone with data quality expertise is needed. Sometimes, he added, those experts are borrowed from other standing committees. Another option is to go outside the SAB to locate experts in non-government affiliated jobs, which has been done increasingly over the past 6 months. But overall, Mr. Flaak stated, the Staff Office’s biggest concern is that for the past 20 years, the SAB has stayed the same, and that process appears to be

not working, and they are starting to get bogged down. He concluded by saying that there has to be a better way to organize the SAB.

Dr. Vu then added an example to illustrate the points made by Mr. Flaak. For this fiscal year, she said, the SAB has roughly 30 activity projects and studies that are spread out to 10 standing committees. But 10 of those projects or studies are taken up by special *ad hoc* panels because the Board is really trying to draw on the expertise found on other standing committees, as no one committee uniquely can address all these issues. So, the result is that more and more integrated *ad hoc* panels and committees are being formed. But, she said, this leads to the point that *ad hoc* committees can always be formed, but the key questions are whether or not they have enough work to sustain themselves and whether there should be an entirely different substructure.

Following Dr. Vu's comments, a participant commended the Reorganization Sub-Committee and the staff for their efforts to date. He then read a quote from Dr. Glaze's editorial, saying, in sum, that economics and social and behavioral sciences should be brought into the decision-making process sooner. The discussant then put forth two proposals recommended by COSSA. The first proposal would be to create a social and behavioral science subcommittee, noting that currently there are not many social and behavioral scientists on the committees, and that this would provide the Board with a good talent pool from which to draw when creating various *ad hoc* committees. The second proposal put forth would be to place more social and behavioral scientists on the current committees. For example, he said, on the Drinking Water Committee, there should probably be a land use specialist; and on the Integrated Human Exposure Committee, there should probably be an environmental inequality expert. He felt that there were a lot of different ways in which social and behavioral science could be brought into the Board.

A question was then posed to Mr. Flaak, asking him to explain how the decision is currently made to establish an *ad hoc* committee that may be a subcommittee of a standing committee versus the subcommittees of the Executive Committee.

Mr. Flaak answered this question by stating that the standing committees have been around for a while, so, in an effort to maintain their viability, the Board first looks to the standing committees to see if it is appropriate for one of them to handle a particular topic or issue. In the past, many cases were handled like this because the standing committee had the proper expertise and necessary broadness. A standing committee may not necessarily have the appropriate expertise or may lack the broadness necessary, so an *ad hoc* committee would be created with experts from other standing committees and from the outside community. He pointed out that notices are placed in the *Federal Register* asking for experts to serve on certain panels. But the biggest difference between the two, Mr. Flaak said, is that the standing committees tend to normally support a particular program area, while the *ad hoc* committees are designed for projects that are without a 'clear home' with a standing committee, thus necessitating the formation of a panel.

A participant then inquired about the Board's line of reasoning concerning changing the model or structure of the SAB. She asked 'does the Board feel like it is stuck with the committee structure? Is it really looking to move away from the current system, or is it more looking for modifications to the status quo structure?'

Dr. Vu answered these questions, stating that the legislative mandate that set up the SAB to do the work left the question of how the work is done up to the Board, so there is a great deal of flexibility. When the Board was first set up, it was organized to deal with the pressing issues at that time. Over the years and as new issues arose, additions were made to this structure, so the Board added more committees. Managing those committees, especially with a small staff, is the key consideration. ‘How can the SAB be most effective?’ It is really a balancing act, she noted.

Another participant pointed out that it sounded as though the staff was indicating that the process is not working. The reports that he has seen have indicated otherwise. He felt that if the staff was in fact saying that the system was not working because there was a backlog or that individual requests were not being met, then that was a different issue altogether. His suggestion was that the SAB might want to move towards having a committee structure with the resources for creating numerous *ad hoc* committees. The committees should not be based on a specific media, but on an overall discipline. Experts could then be selected from various committees to comprise a new *ad hoc* committee designed to deal with one particular issue. He ended his comments by stating that he felt that a media-specific committee structure was not as efficient as another structure could be.

Mr. Flaak responded to those comments by saying that the Staff feels like the standing committee structure is becoming less flexible. For instance, there is a problem if a drinking water issue goes before the Water Committee and there are no appropriate experts on the committee even though the issue is within the jurisdiction of the committee. But, he said, *ad hoc* committees provide necessary flexibility to the process in that one can pick the experts, convene the committee, and get the report out. Also, a key consideration is speed, and standing committees tend to be slow in completing their reports.

Additionally, Mr. Flaak said that the Staff had discussed the idea put forth regarding the larger, broader standing committees versus the exclusive use of *ad hoc* committees. Their proposal had revolved around a structure in which there was an Executive Board and 3 or 4 larger committees, with the rest of the work done by established *ad hoc* committees. One consideration and limiting factor is FACA, he noted, in that a subcommittee of a standing committee has to go back through the standing committee before it gets to report to the Executive Committee. This adds another meeting and maybe 2 months to the process. With Executive panels, however, the panel can report directly to the Executive Committee.

A participant then commented that there seemed to be two separate issues being discussed. The first issue being how an *ad hoc* committee or panel would be staffed, with flexibility being key. ‘One would not want a report stuck in peer review for 5 years,’ he said. An *ad hoc* system is flexible enough to add a dioxin specialist and a statistician to a committee if needed. The same applies to social and behavioral experts and data quality experts. The second issue he raised was that the SAB does not have the authority to make policy, and that he does not want the standing committees to force policy. He added that he was wary of the standing committee structure because he did not want standing committees in place with the implication that everything that the EPA deals with, for example, data quality, has to go through the data quality subcommittee. He did say, however, that it was totally legitimate for people to say that the Board is not looking at certain issues and that they need to add that aspect or expertise to the Board.

Another participant stated that she felt that one of the benefits of having standing committees was that the people got to know each other well, and that the work could therefore be completed quicker. Whereas with *ad hoc* committees, the committee members might not be able to form working relationships and that the work would proceed more slowly. She then asked the Staff Office if they had any notion as to which system seemed to work best.

Mr. Flaak answered her question, saying that if the standing committee meets on a regular basis, then it works well. But, they don't all meet on a consistent basis. For example, he pointed out that the Integrated Human Exposure Committee did not meet last year, so when they meet this year, some of the members will be new. His estimate was that overall the results are varied.

Mr. Butterfield then both made an observation and posed a question. First, with regard to the comments about the enabling legislation, he felt it was a correct assumption that the legislation envisions the use of member committees and investigative panels. He stated that the Board was not really looking to move completely away from that structure, where all the members are looking at every issue that comes to the Board. But he said the key issues are subcommittees versus panels, and *ad hoc* committees versus standing committees. As for his question, Mr. Butterfield first pointed out that the SAB is not a policy board, but then he asked one of the participants if he saw the potential within the current system for standing committees to force policy upon the Board.

The participant in question responded that he did not see that potential. He said that he was just concerned that with standing committees, people might work for their own issues. It was more of a caution than anything else, he commented. He emphasized though that he didn't want the tail wagging the dog.

At this point, a participant answered an earlier question, saying that his interpretation of reading the authorizing legislation indicates that the SAB is an advisory committee. 'Its job is to advise Congress,' he stated. With regard to a statistical committee, he said that he would call it an 'information quality' committee, which he thought of when listening to one of the participants raise the issue of environmental indicators. As a statistician, the participant said that he was not comfortable with those indicators, and that there should therefore be a 'statistical quality committee' to serve as a resource to the Administrator and the other committees.

Another participant then said that he was trying to 'determine the staff's thoughts, specifically, the terms in which they were thinking.' He wondered if more liaison and outreach to professional associations would be helpful to reduce the staff's backlog. He suggested that issues be sent to professional organizations stipulating that the SAB needs preparation work accomplished on a particular issue. Dr. Glaze mentioned the need for outside experts to help in his article, he pointed out.

A different participant then asked two related questions. First, speaking realistically, he asked whether the large increase in the Board's activities and size had been accompanied by an increase in the budget. And secondly, whether the status quo system would work if there was an increase in the budget and the staff was enlarged as well.

Dr. Vu responded that since the EPA was still under a continuing resolution, she would not comment on budget issues.

The same participant asked whether historically the budget had been increased at all.

Dr. Vu replied that if one was to review the annual report that the Staff Office issued last year, the budget has remained flat.

Mr. Flaak added to the discussion by saying that the real limiting factor is staff, and that if there were more money to hire additional staffers, then the Office could take on more responsibility.

The participant in question then restated his previous question, asking whether the status quo structure would work if there were more money.

Mr. Flaak then replied that in that hypothetical situation, they could probably do more.

Another participant then said that his understanding was that the SAB responds to both EPA and Congressional requests. Given that dual tasking, he asked whether Congressional requests go through the same committee structure.

Mr. Flaak said that the Board receives very few Congressional requests. There is the annual request to do the ORD Budget and the Science and Technology Budget for the Agency, but beyond that, he noted, the requests are very few. But when they do occur, the Congressional requests are handled pretty much in the same way as any other review.

Dr. Vu seconded Mr. Flaak's answer, saying that indeed Congress makes very few direct requests. But she did note however, that sometimes Congress makes indirect requests, in that Congress may ask the EPA to have the SAB work on a particular issue.

A participant raised the point that sometimes the Agency, instead of going to the SAB, will ask the NAS or NRC to do specific work. He asked how that decision is made, and, additionally, the impact on the Board's effectiveness if more work were sent to the NAS and the NRC.

Dr. Vu said she could provide a very general answer, but that some requests have specific reasons for going to a certain organization. But overall, if an issue is broader than the SAB, then it will go to an outside group, like the NAS. However, if the issue were specific to the EPA, then the Board would be involved in an advisory capacity.

Mr. Flaak also pointed out that the NAS has limited subjectivity to FACA, while almost everything that the Board does is under FACA. So that while the Board must operate out in the open, he continued, everything the NAS does can be behind closed doors until the final report is issued.

Another participant said that he wanted to second a point made earlier, saying that he felt the most flexible system would be one in which there was one Science Advisory Board with no

committees. In that scenario, the SAB would operate like the Executive Committee currently does, with one panel of distinguished experts from a wide range of fields which could task other organizations, such as the American Chemical Society or the American Sociological Society. He said 'that with this approach, the Board would not only get the best experts straight from the disciplines, but also achieve the greatest flexibility.'

He also commented on the statement made earlier regarding the fear that a committee might force its ideas on the Board. He said that within the status quo committee structure, he did not see any real potential for a social and behavioral science committee to wag the dog, since this would be a committee comprised of experts, not advocates, and thus would not plead their case for a specific issue.

Another participant then commented on those ideas. Concerning the notion of shopping work out to professional organizations, she questioned the independence of those people. With the current system, she pointed out that all the nominations are done in full public view, and sometimes with public participation. But if the work were to be shopped out, the Board would lose that transparency. If everyone trusted each other, she hypothesized, then that idea would work, but realistically, that is not the case. She suggested that maybe there could be a 2-tiered system, in which the non-controversial issues could be shopped out, while the controversial issues would be kept within the SAB structure.

[It should also be noted that, under FACA regulations, it would not be permissible for the EPA Science Advisory Board or any other Federal advisory committee to simply delegate its activities to an outside entity, as was suggested in the preceding, and following, discussion.]

She also asked the SAB staff if they had been having difficulty or starting to have difficulty getting people to serve on committees. She also asked whether it was easier to get people on standing committees, as opposed to *ad hoc* committees.

Mr. Flaak responded first to her second question by saying that it was easier to get people to serve on the standing committees because there was a little more cachet attached to it since one would be appointed by the Administrator and would be a member of the SAB, while panel members are only consultants. In addressing her first question, Mr. Flaak said that sometimes the Staff Office would get a good turn out for some committees- like TCE and Metals, and at other times, the turn out would be poor. For instance, the Clean Air Scientific Advisory Committee is forming a new subcommittee to review the National Ambient Air Monitoring Strategy that now has eight nominees, but for a while it only had one.

A participant said that he would suggest having people appointed to the SAB for the cachet, but then doled out to work on various issues or committees. But he noted that his approach probably differs from others in that he feels an Executive Committee is a necessary component 'because, realistically, all 107 people are not going to be able to be in a room at the same time.' So, therefore, it is more appropriate to group the experts by issue or area of specialty. He closed his remarks by posing a question to the staff, asking how closely tied SAB is to the individual media ops peer review process.

Mr. Flaak answered his query by stating that the Board annually peer reviews about 30 of the 1000 documents from the EPA. The Agency has a system in place to gather all the work and then assign the work to the appropriate party. Within that system, each office has its own protocol for handling those peer reviews. If there is an issue that is relevant to the Board, the DFO [Designated Federal Officer, a FACA term] gathers all the germane information and documents and then makes the review assignment. The EPA does have resources available so the SAB can monitor activities across the EPA. Right now, the staff is trying to get the SAB system linked up with the EPA system.

One of the participants returned to a question raised earlier: whether the current system would work if more resources were provided. He suggested that the staff needed to define the problem as either a resource issue or a committee issue. If it were a committee issue, then perhaps the best thing would be to take a blank slate and start over, he advised. Switching topics to the ‘farming out work’ issue, he said that when he talked about it earlier, he never intended to suggest that the outside organizations actually conduct the peer review, but rather that they ‘grease the skids’ to speed up the process and add more key questions.

Dr. Vu responded, indicating that the Reorganization Sub-Committee was looking for a structure that would be responsive, while effectively covering all the issues. She said that the Board did not want to box itself in. They want an exhaustive discussion regarding potential options for the Board.

The final question before a 10-minute break was whether or not the staff was turning away work or requests.

Dr. Vu said it was not.

The discussion resumed after the break, with a participant raising two points. First, with regard to his point earlier about the committee wagging the dog, he said he was concerned about a rapid proliferation of committees to cover every imaginable issue. He asked whether it was desirable to have the Board create a committee for every issue. He felt that if there was a committee for each issue, the EPA might feel forced to send everything on that issue through that committee, which might force the Agency’s hand in policy development. Secondly, he stated that he has always been impressed by the quality of science that has come from the SAB. He conceded that there will always be a little bit of bias, but that it is unavoidable. He noted that in the past, when there were sensitive issues, the Board went out of its way to achieve balance. He said that he would be bothered if the standing committee structure was abolished and there was only an Executive Committee. He said that while he agrees that there should be a panel of experts available, he did not feel that the EC was that panel. Some of those people are in fact there for their scientific expertise, but others were there only to balance the input, which could open the panel up to bias.

Another participant continued with those comments, stating that his organization would be strongly opposed to farming out work. He said that the Board has made a lot of improvement recently because of changes made to the panel selection process. He said the Board would lose a lot of independence if work was to be farmed out, and that would represent a “backsliding” in

progress. He also returned to the previously raised question of the difficulty of attracting people to serve on committees. On this subject, the discussant said that with the improvements in the panel selection process, it has become easier for the Board to get people. He also said that feedback from the people to whom he and the NRDC have talked indicated that the deliberations of committees have become a better experience. Specifically, people from the TCE and Metals Committees have said they feel that a dramatic change for the better has taken place. From this, he continued, the committees seem to be working well and improving. He was more concerned about losing independence and objectivity in the 'farming work out' structure.

A different participant stated that he had a problem with farming out work to professional associations, but he didn't think the key issue was one of independence. He felt that the associations would be fairly independent. The biggest problem that he saw was that the associations' meeting structure is very erratic, and that it would be difficult to reconcile this obstacle. He also commented on the idea of doing away with the standing committee structure, saying that he agreed that the Board did not have to have standing committees. Instead, he suggested that the Board could have plenary committees with an Executive Committee within that structure, and then have working groups deal with specific issues as they arise.

Another participant then stated that he agreed that the idea of abolishing the committee structure was a novel idea. Since they have been in place for 25 years, perhaps it had become too rigid, and that perhaps some experts have become pigeonholed. However, there are certain aspects of a standing committee structure that are quite valuable, such as the ability to form working relationships. This is what was seen on the Metals Assessment Panel, which quickly formed a working relationship, thereby speeding up their process. He continued, saying that the current structure could be maintained if there were a subgroup of experts available in reserve. Perhaps 10 or 11 groups could have area-specific experts readily available to form flexible panels that would address each issue as it arises. This would also allow people to form working relationships if they serve 2-3 years in the pool.

It was then asked if the SAB usually has interagency representatives on their panels.

Dr. Vu replied that though SAB members are required to be non-federal experts, each specific panel consults with federal experts.

The inquiring participant then raised the question of what would happen if a federal expert were nominated.

Dr. Vu responded that the law says that the Board cannot have federal experts.

It was then asked whether or not an *ad hoc* panel could include federal experts.

Mr. Flaak replied in the affirmative that, in the past, federal experts have been included on panels. He indicated that there are a number of different classifications for panelists: members, consultants, and liaisons. Liaisons are often federal experts from another agency. Sometimes federal experts brief the panel. If a federal expert is one of the real experts in a particular field, then the Staff Office tries to get him or her.

A participant then asked whether, within the current process, the Staff Office routinely reviews the committee structure with a view towards phasing out committees that have had no business for a year or more.

Dr. Vu responded by detailing the committee process, saying that members are appointed for 2-year terms, and can be nominated for a second term. In appointing members, the SAB asks the public for nominations and input, and then the Staff Office makes recommendations to the Administrator. When a panel is formed, the Board uses the panel formation process to avoid any conflict of interest or impartiality that may have otherwise arisen.

Mr. Flaak added to Dr. Vu's comments, saying that there is no formal system set up to review the panel structure. However, the staff does take notice on the process and asks itself if certain *ad hoc* committees are still needed. An example would be the IHAC [the Integrated Human Exposure Committee], which has not had work in a long time.

One of the participants then seconded earlier comments regarding abolition of the committee structure. He then wondered whether eliminating the standing committees would still preserve the cachet for appointments to a SAB working group or *ad hoc* committee.

Dr. Vu responded that the Board is flexible in how it does its business.

A participant took the opportunity to say that he felt the panel selection process was excellent, in that it acquires experts who focus in a specific area. However, he said 'the selection process seemed tedious and cumbersome.' He felt that the 'pool of experts' suggestion that he put forward earlier was more of a hybrid approach, with members still getting to forge working relationships while also customizing the expertise of the panels towards a specific issue. He asked if this made sense.

Mr. Flaak replied affirmatively.

A participant then asked if there was a formal review process to look at the issues that have come up over the past 5-10 years in an effort to identify trends.

Dr. Vu responded that there was no formal study, but that the Staff Office makes sure the Board is meeting its mission to advise the EPA on the most pressing issues of the times, although it is done informally.

A participant then spoke to comments made earlier that the panel selection process was slow and tedious. He began by referencing Mr. Pruszkowski's comments at the beginning of the session when he asked how one should measure success. With that in mind, he said that it comes down to an issue of quality versus quantity. He felt that the reports that have come out this calendar year have been good, and that it seems that the efficiency of the process is also increasing. Therefore, he felt it was better to measure success based on quality as opposed to the quantity of reports issued.

Mr. Flaak commented that the Board has begun regarding its work as ‘outputs versus outcomes,’ with more importance given to the impact of the report rather than the number of products provided. To this point in time, the Board has not asked outsiders to evaluate their work. However, the Staff Office was planning on doing so in the coming year.

There were no more questions or comments, so Mr. Pruszkowski, the facilitator, stated that the discussion seemed to have run its course within the time boundaries. He then offered some general observations from a larger perspective to lead the session towards closure. He started by summarizing the various suggestions that were put forth during the meeting.

- There were a number of committee recommendations that included the notion of adding additional committees and/or having one large SAB with *ad hoc* working groups or committees to handle the work assignments.
- There were suggestions to add a statistics committee, and a call for greater inclusion of social and behavioral scientists on SAB committees, or even a social and behavioral science stand alone committee.
- There were calls for a data quality committee and an environmental information committee, as well as an information quality committee.
- There was a suggestion for greater involvement of statisticians on the committees.
- There was issue of communication between different committees, and how best to achieve the cross-fertilization of ideas.

In conclusion, he said that everyone seemed to agree that the quality of the SAB’s work was high, especially during the last 6 months.

Dr. Vu then thanked Mr. Pruszkowski, and asked the group if there were any more questions.

At this point, a participant asked whether a transcript of the meeting would be made available.

Dr. Vu answered in the affirmative, and then asked Mr. Butterfield to give a quick summary of the next steps to be taken.

Mr. Butterfield said that he appreciated everyone’s participation and candor, and that he found the meeting to be very educational. While saying that once he had the minutes he would be able to better synthesize all that was said, he did want to mention a couple of things that he came away with. First, he felt that having the committee structure was a good thing, and that they did not want to move away from it. At the beginning he noted, there was a lot of talk about adding committees, but as the session went on, there was more talk about moving toward a structure that facilitates *ad hoc* committees more so than standing committees. He also said he was glad to hear a number of participants express their confidence in the scientific quality of the Board’s work. He noted, however, there were cautions against having too many standing committees. Overall, he saw the mood shift in favor of a committee structure, but one that allows for agility, diversity, broadness, and flexibility so that the Board can tackle a number of issues effectively.

Dr. Vu then said that while policy procedure was not really discussed, this format seemed to be a good way to conduct business.

At this point, Mr. Butterfield said that he wanted to provide everyone one last opportunity to have their opinion heard before the meeting was adjourned. He also asked the participants to provide written feedback as well. He then stated that this was the first step in a process that is envisioned to take the better part of one year to implement, culminating in the successful reorganization of the EPA's Science Advisory Board. He again highlighted the need for public input.

Dr. Vu then thanked everyone for coming, and said that there were a number of good thoughts put forward for the Staff Office to consider. She stated that another meeting is in the process of being organized.

Mr. Butterfield concluded by saying that the minutes would be posted on the website before the end of the year. He then once more thanked everyone for coming, and adjourned the meeting.

AGENDA FOR

WEDNESDAY, DECEMBER 4, 2002 ❖ 9:30 AM TO 12:00 PM

SHERATON CRYSTAL CITY HOTEL, ARLINGTON, VA

APPENDIX B

List of Attendees for the Public Input Session on Prospective EPA Science Advisory Board Reorganization and Structural Changes

Members of the Public:

John Arnett
Copper and Brass Fabricators Council

Danielle Asselin
Center for Health, Environment and Justice

Nancy Beck
Office of Information and Regulatory Affairs

Patricia Casano
General Electric Company

Dave Clarke
American Chemistry Council

Deborah Connors
GSA Committee Management Secretariat

Steve Gurney
Natural Resources Defense Council

Pat Phibbs
BNA, Inc.

Tom Purcell
American Petroleum Institute

Terry Quill
Duane Morris LLP

Scott Slaughter
Center for Regulatory Effectiveness

Edward J. Spar
Council of Professional Associations on Federal Statistics

John Wertman
Consortium of Social Science Associations

Science Advisory Board Staff Office:

Dr. Vanessa Vu
Director

Robert Flaak
Acting Deputy Director

Fred Butterfield
Designated Federal Officer, SAB Executive Committee Reorganization Sub-Committee

Contractor Support Staff:

Bob Pruszkowski, SAIC
Meeting Facilitator

Andy Diamond, SAIC
Technical Meeting Minutes

Sandra Vincze, MEGA-TECH, Inc.
Logistical Meeting Support

APPENDIX C

Editorial By Dr. William Glaze

US EPA Science Advisory Board Newsletter Page 2

The SAB: A Grand Tradition and a Great Future

Since 1978, the EPA Science Advisory Board has arguably been the most effective

science advisory board in the Federal government. All who are familiar with the Board know that it has made many contributions to helping the Agency maintain a high level of science in the decisions it has made, the regulations it has promulgated, and the programs it has established. Now the SAB shares with the Agency new challenges, and it is appropriate for us to ask: can we do our job even more effectively?

Since I became involved with the SAB in the late 1980s, I have shared with many of my colleagues a deep respect for the SAB Staff who do its work on a day-to-day basis, and the many fine scientists who contribute to its panels and the standing committees as a public service. This is one aspect of the SAB that I know will never change, and whatever we do in the future, we must continue to find and retain the best people for these positions. We must admit, however, that the world is changing and if we wish to protect it, we too must change.

What are these changes and what do they portend for the way the SAB does its business? The first I want to mention is really not a change, it is a realization that all environmental problems are much more complex than we acknowledged in the past. In the early days of environmental protection, it was understandable for us to focus on the pollution that was apparent to anyone; to arrange our programs around media: air, water, and soil; to focus on single compounds rather than the ubiquitous mixtures around us; or to treat human health and ecological health as if they were unrelated. The intervening years have shown us that this strategy is neither scientifically defensible nor always conducive to good policy making. At the most general level the environment and public health has to be understood as a system, and we must always be aware of links between its various compartments as we try to make decisions to protect it. Dealing with this through a systems approach is one of our challenges, one that we must help the Agency deal with.

Fortunately, science can provide us with the ways to deal with these complex systems; but this raises another challenge for the SAB. As any science grows more deeply specialized, it becomes increasingly difficult for a non-specialist to understand, even one grounded in the basics. New science makes the work of the Agency more credible in principle, but how does the SAB face the challenge of reviewing this work of increasing depth and complexity. There is really only one solution for the SAB: we simply must convince the best people from all of the important research areas to serve as expert reviewers if we are to give the Agency the best

advice. Is the current way we do business in the SAB accomplishing this goal? If not, we must find a better way.

Another major development in environmental protection that is reflected on the SAB is this: we have come to understand that environmental protection is not only an enterprise of the physical, biological, chemical, and engineering sciences. For environmental decisions to be made and implemented effectively we must bring the economics and the social and behavioral sciences into the process sooner and more effectively. We must take into account how people make their decisions; how they value protection of themselves, endangered species, and ecosystems; and how environmental protection fits into the entire regime of economic and social development. We must acknowledge that the study of these and other human characteristics is a sophisticated scholarly enterprise that must be factored into our work. Of course, wise heads in the Agency and the SAB knew this all along, but too often our narrow professional focus cause us to omit the very factors that might make our work more effective.

Finally, in the future we must assist the Agency in anticipating the problems of the future and how the Agency might address them, often with programs that go beyond command and control. For example, we might help develop a better assessment of complex topics such as the effects of climate change on ecosystems, which will probably be rectified by education and voluntary actions rather than regulations. We should also help the Agency develop ways to assess the state of the environment, and through careful analysis suggest how this type of assessment can guide future Agency program development. And finally, we must assist the Agency to recognize, anticipate and respond to new challenges that are not anticipated at this time. The SAB, therefore, must be an agile and responsive organization while continuing its call for the very highest standards in its work and its reviews.

/Signed/

William H. Glaze, Ph.D.
Chair, SAB Executive Committee